

Vindicia migrates multi-tenant SaaS subscription management platform to Amazon Aurora for scalability



Case Study

Executive Summary

Moving the Vindicia platform to Amazon Aurora allows the company to scale more quickly and increase transaction throughput to better serve their customers. The fully managed services, limitless scalability, and global availability of AWS helps the team deliver secure, low-latency experiences to merchants around the world without all the heavy lifting.

The Challenge

As a multi-tenant SaaS application that guarantees a 99.99% uptime SLA with no downtime upgrades, Vindicia must seamlessly scale to respond to changes in demand. On average, the platform processes 25 transactions per second—up to tens of millions of transactions per day. However, during events and promotions, it must support spikes as high as 400 transactions per second.

As the platform has gained in popularity, it has become increasingly time consuming and costly for its IT team to maintain adequate on-premises infrastructure while delivering the same level of service. Similarly, serving customers across the globe from a single datacenter introduces latency challenges.

The Solution

Originally built on Oracle, the Vindicia platform was migrated to PostgreSQL as part of company-wide initiative to lower licensing costs. The team continues to optimize the solution by moving it to Amazon Aurora where they can take advantage of the fully managed services, limitless scalability, and global availability of AWS. The datacenter still houses approximately 150+ existing customers, however, new and international customers run on Amazon Aurora. The company plans to migrate all customers to AWS and close the datacenter.

About Vindicia

Vindicia, an Amdocs company, supports B2C businesses that offer their services and products on a recurring model through a SaaS-based subscription lifecycle management platform. Vindicia offers comprehensive solutions that help businesses acquire and retain more customers. Combining big data analytics, strategic consulting and proprietary retention technology, Vindicia provides its clients with more recurring revenue, more customer data, better insights, and greater value throughout the entire subscriber lifecycle. To learn more visit www.vindicia.com.

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— Steven Azar
Senior Manager, Data Programs

Results and Benefits

Running the Vindicia platform on Amazon Aurora allows the company to scale more quickly to meet their merchants' change on demand without having to do the heavy lifting themselves. Furthermore, AWS security and compliance certifications and its global coverage, as provided through AWS Regions and Availability Zones, help Vindicia deliver secure, low-latency experiences for customers anywhere. On Amazon Aurora, "Vindicia offers merchants piece of mind and the ability to start small, grow rapidly, and expand globally, with a partner that can support their evolving business needs," mentioned Jesus Luzardo, Vice President, Head of Growth.

Scale infrastructure to meet needs of highly elastic customers

The driving force behind the move to the cloud was the need to access highly tuned resources on-demand. "It used to be that when we needed to scale up, someone would go into the cage to expand and upgrade the hardware," explained Michael Judge, Vice President of Product Management. By moving to Amazon Aurora, Vindicia can now scale in a matter of minutes versus days without needing to send in technicians to hook up new boxes or tune existing servers. "Not having to worry about the day-to-day operational maintenance of the system is huge for us." Several customers are already benefiting from this elasticity to offer live events subscription and promotions.

Increase transaction throughput by leveraging the open source architecture

In addition to improving scalability, the team also wanted to increase transaction throughput to offer their customers a better experience. Vindicia originally architected its platform to automatically divert big requests to a read-only replica so normal read/write activities could continue without delays. However, the underlying hardware and software of the on-premises datacenter hadn't been able to support this capability to its fullest extent without manual intervention. "AWS has made PostgreSQL functionality available in a much more efficient way through Amazon Aurora," said Steven Azar, Senior Manager of Data Programs.

Provide ease of mind to customers with AWS security and compliance

Many of Vindicia's customers must adhere to strict PCI and SOC regulations. As such, they want to be assured that Vindicia is also compliant. "In the past, even though we had more than 14 years of experience in this space working with merchants, we had to prove ourselves with new merchants," said Steven. "Now that we can point to AWS and Amazon Aurora, it increases the credibility in this area. It checks off the boxes on our proposals for compliance and security without requiring us to do all the reporting legwork." Michael also pointed out that "moving to regional deployment on AWS with Amazon Aurora also simplifies our ability to address the growing needs for data residency and sovereignty."

Learn more

[Amazon Aurora](#) is a MySQL and PostgreSQL-compatible relational database built for the cloud, that combines the performance and availability of traditional enterprise databases with the simplicity and cost-effectiveness of open source databases. Amazon Aurora is up to five times faster than standard MySQL databases and three times faster than standard PostgreSQL databases. It provides the security, availability, and reliability of commercial databases at 1/10th the cost.

"Beyond defraying the costs, the move to AWS makes the tedious on-premises jobs we worry about go away. We look forward to using the capabilities of Amazon Aurora to access data more efficiently. "

— Steven Azar
Senior Manager of
Data Programs
